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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,882	07/09/2003	Akifumi Kamijima	116467	9910
25944	7590	06/09/2004	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			GURLEY, LYNNE ANN	
			ART UNIT	PAPER NUMBER
			2812	

DATE MAILED: 06/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/614,882

Applicant(s)

KAMIJIMA, AKIFUMI

Examiner

Lynne A. Gurley

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) 1-3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


LYNNE A. GURLEY
PRIMARY PATENT EXAMINER
TC 2800, AU 2812

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date 3/9/04.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of claim 4 in Paper No. 3/11/04 is acknowledged. The traversal is on the ground(s) that "there is no undue burden for performing a prior art search for all of the pending claims". This is not found persuasive because the search is not coextensive for the method claims 1-3 and the device claim 4. Therefore, the search is considered to be burdensome.

The requirement is still deemed proper and is therefore made FINAL.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 4 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Lin et al. (US 6,372,661, dated 4/16/02).

Lin shows the method as claimed in figure 2 and corresponding text with 5 levels of metallization (5 sublayers, wherein $M=5$ and the first sublayer is on the substrate) and each sublayer has a first portion having a sidewall and a second portion coupled to an end of the first portion near an (N+1) the sublayer; the second portion includes overhang portions that overhang and extend more outward than the sidewall of the first portion; and the first portion of the first sublayer is located on the substrate.

6. Claim 4 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Liu et al. (US 6,287,961, dated 9/11/01).

Liu shows the method as claimed in figure 9 and corresponding text with 2 levels of metallization (2 sublayers, wherein $M=2$ and the first sublayer is on the substrate) and each sublayer has a first portion having a sidewall and a second portion coupled to an end of the first portion near an (N+1) the sublayer; the second portion includes overhang portions that overhang and extend more outward than the sidewall of the first portion; and the first portion of the first sublayer is located on the substrate.

7. Claim 4 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Wu (US 5,976,967, dated 11/2/99).

Wu shows the method as claimed in figure 9 and corresponding text with 2 levels of metallization (2 sublayers, wherein $M=2$ and the first sublayer is on the substrate) and each sublayer has a first portion having a sidewall and a second portion coupled to an end of the first portion near an $(N+1)$ the sublayer; the second portion includes overhang portions that overhang and extend more outward than the sidewall of the first portion; and the first portion of the first sublayer is located on the substrate.

8. Claim 4 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Schacham-Diamand et al. (US 5,824,599, dated 10/20/98).

Schacham-Diamand shows the method as claimed in figure 20 and corresponding text with 3 levels of metallization (3 sublayers, wherein $M=3$ and the first sublayer is on the substrate) and each sublayer has a first portion having a sidewall and a second portion coupled to an end of the first portion near an $(N+1)$ the sublayer; the second portion includes overhang portions that overhang and extend more outward than the sidewall of the first portion; and the first portion of the first sublayer is located on the substrate.

9. Claim 4 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Agnello et al. (US 6,255,217, dated 7/3/01).

Agnello shows the method as claimed in the only figure and corresponding text with 2 levels of metallization (2 sublayers, wherein $M=2$ and the first sublayer is on the substrate) and each sublayer has a first portion having a sidewall and a second portion coupled to an end of the first portion near an $(N+1)$ the sublayer; the second portion includes overhang portions that

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overhang and extend more outward than the sidewall of the first portion; and the first portion of the first sublayer is located on the substrate.

Response to Arguments

10. Applicant's arguments, see the amendment, filed 3/11/04, with respect to the rejection(s) of claim(s) 4 under 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the newly found prior art of record.

11. Applicant's arguments with respect to claim 4 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See the additionally art listed on the PTO Form 892 for additional structures which meet the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynne A. Gurley whose telephone number is 571-272-1670. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Niebling can be reached on 571-272-1679. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lynne A. Gurley
Primary Patent Examiner
TC 2800, AU 2812

LAG
June 1, 2004